

PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q76502

Beatrice MARTIN, et al.

Appln. No.: 10/629,597

Group Art Unit: 2144

Confirmation No.: 6211

Examiner: Mohamed IBRAHIM

Filed: July 30, 2003

For: A DEVICE FOR TAKING CONTROL OF RESOURCES IN A COMMUNICATION
NETWORK IN ORDER TO INSERT TRAFFIC

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

Table of Contents

I. REAL PARTY IN INTEREST.....	2
II. RELATED APPEALS AND INTERFERENCES	3
III. STATUS OF CLAIMS.....	4
IV. STATUS OF AMENDMENTS.....	5
V. SUMMARY OF THE CLAIMED SUBJECT MATTER	6
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	7
VII. ARGUMENT	8
CLAIMS APPENDIX	17
EVIDENCE APPENDIX:	23
RELATED PROCEEDINGS APPENDIX.....	24

I. REAL PARTY IN INTEREST

The real party of interest in this appeal is ALCATEL. Assignment of the application was submitted in the U.S. Patent and Trademark Office on July 30, 2003, and recorded on the same date at Reel 014355, Frame 0785 .

II. RELATED APPEALS AND INTERFERENCES

There are no known appeals or interferences that will affect, be directly affected by, or have a bearing on the Board's decision in the pending Appeal.

III. STATUS OF CLAIMS

Claims 1-21 are all the claims pending in the application and the subject of this appeal.

Claims 1-8, 10-12, 14, and 16 are rejected under 35 U.S.C. § 102(e) as being anticipated by Torikka et al. (U.S. Patent No. 6,937,577, hereafter “Torikka”). Claims 9, 13, 15, and 17-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Torikka in view of Karabinis (U.S. Patent No. 6,856,787).

IV. STATUS OF AMENDMENTS

No claim amendments were requested subsequent to the November 27, 2007 Final Office Action.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a data management device (for example, D, FIG. 2) for a communication installation including at least one base station (for example, Node B) having resources and at least one terrestrial node (for example, radio network controller “RNC”) connected to a core network (for example, CN) and to said base station (for example, Node B) to control its resources via an interface (for example, page 9, lines 16-22), the device comprising control means (for example, control module M) configured to be coupled to a traffic source (for example, “TS”) and to said interface and configured to take local control, on command, of at least a portion of said resources of said base station (for example, page 11, lines 2-30), instead of said terrestrial node (for example, radio network controller “RNC”), to enable transfer of data between said traffic source and said base station (for example, page 11, line 8 to page 13, line 6).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- I. Rejection of claims 1-8, 10-12, 14 and 16 under 35 U.S.C. § 102(e) as being anticipated by Torikka.
- II. Rejection of claims 9, 13, 15, and 17-21 under 35 U.S.C. § 103(a) as being unpatentable over Torikka in view of Karabinis.

VII. ARGUMENT

Appellant respectfully submits that independent claim 1 is not anticipated by Torikka, because the cited reference does not teach or suggest all of the features of the claims.

Disclosure of Torikka

Torikka generally related to a telecommunications system which comprises at least one base station node 12, a base station controller node 14 for controlling the base station node 12, a switching center node 16 operationally connected to the base station controller node 14, and which handles the traffic to and from the at least one base station node 12. At least one of the nodes provides functionality for use in the operation of the telecommunications system, and a software configurable board unit which provides general purpose resource is implemented within the at least one node (column 3, lines 7-20). Accordingly, the functionality of the board unit can be changed in accordance with particular requirements of the telecommunications system (the Abstract).

Analysis

Independent claim 1 recites:

A data management device for a communication installation including at least one base station having resources and at least one terrestrial node connected to a core network and to said base station to control its resources via an interface, the device comprising control means configured to be coupled to a traffic source and to said interface and configured to take local control, on command, of at least a portion of said resources of said base station, instead of said terrestrial node, to enable transfer of data between said traffic source and said base station.

According to this aspect of the invention, a control module of a data management device momentarily, and on command, assumes local control of some or all of the radio resources of one or more Nodes B on place of a terrestrial node (RNC) to which the Nodes B are coupled. The taking of control by the device allows the device to be substituted for the terrestrial node, to enable transmission of traffic (or transfer of data) between the traffic source to which the device is coupled, and a user equipment. Appellant respectfully submits that at least this aspect of the claims is neither taught nor suggested by the cited reference.

First, Appellant respectfully submits that the Examiner has not articulated with any specificity how the claimed “data management device” reads on the cited reference. The Examiner fails to provide specific support in the body of the rejections for this aspect of the claimed invention.² However, in the “Response to Arguments” section of the final Office Action of November 27, 2007,³ the Examiner attempts to cure this deficiency by citing FIG. 1 and column 9, lines 32-54 of Torikka as allegedly disclosing the claimed “data management device”, and asserts:

The terminology used to refer to the data management device of the prior art may be different than that which is used in the instant application. Nonetheless, Torikka discloses Radio Network Control (RNC) also known as Base Station Controller (BSC), which includes control unit for determining the system

² See for example page 3 of the Office Action dated February 8, 2007 and page 2 of the final Office Action dated November 27, 2007.

³ Page 3 of the Final Office Action.

requirement for the allocation of resources due to a change in the functionality of the system resources (see e.g. fig. 1 and col. 9 lines 32-54).⁴

Appellant respectfully submits that the Examiner's position is severely flawed for at least the following reasons. Column 9, lines 32-54 of Torikka, which the Examiner cites as allegedly disclosing this feature of the claim, merely discloses an operation for changing the functionality of system resources in a telecommunications network, wherein a control unit determines that the telecommunication system requires a different allocation of resources, and reconfigures several Asynchronous transfer mode Multiplication Boards (AMBs), so that the necessary changes are performed. If a need for a change in the functionality of a telecommunications system arises, a system control unit determines that the telecommunication system requires a different allocation of resources than before. The functionality of an application processor and Asynchronous transfer mode Multiplication Boards is reconfigured such that necessary changes are performed.

Appellant respectfully submits that nothing in this cited portion (or any other portion) of Torikka teaches or suggests a data management device which includes control means configured to be coupled to a traffic source, and which takes local control, on command, of at least a portion of the resources of a base station, instead of a terrestrial node, to enable transfer of data between the traffic source and the base station, as required by independent claim 1.

Further, the relevance of this cited portion of Torikka to the claimed invention remains unclear to Appellant. Nowhere does this cited portion of Torikka teach or suggest a data management device which takes control, on command, of at least a portion of the resources of a

⁴ Pages 9-10 of the final Office Action.

base station instead of a terrestrial node, to enable transfer of data between a traffic source and the base station, as required by the claim.

The Examiner appears to take the position that the claimed “data management device” allegedly reads on the Radio Network Control (RNC) of Torikka. However, the present invention clearly discloses that the Data Management Device (D) is separate from the RNC (FIG. 2) and can be substituted for the RNC (at least at page 12, lines 13-16). Accordingly, Appellant respectfully submits that the Examiner’s characterization that the claimed “data management device” reads on the RNC of Torikka is clearly erroneous and unsound.

The Examiner further asserts:

In response to applicant’s argument that “control means configured to be coupled to a traffic source and to said interface and configured to take local control, on command, of at least a portion of said resources of said base station, instead of said terrestrial node, to enable transfer of data between said traffic source and said base station” a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.⁵

Appellant respectfully disagrees with the Examiner’s position and submits that the structural difference between the claimed invention and the prior art is quite clear. There is no teaching or suggestion in the cited references of a data management device comprising control means configured to be coupled to a traffic source and to an interface. Further, and contrary to

⁵ Page 10 of the Office Action.

the Examiner's assertion, the prior art (Torikka) is not capable of performing an intended use of the claimed invention, since there is no teaching or suggestion in Torikka of any structure which is configured to take local control, on command, of a portion of resources in a base station, instead of a terrestrial node, to enable transfer of data between a traffic source and the base station.

The Examiner appears to take the position that the claimed "terrestrial node" reads on the Radio Network Controller (RNC) (or Base Station Controller (BSC)) (14) of Torrika. In the claimed invention, the data management device takes control away from the terrestrial node. This directly contradicts Torrika, which discloses that the BSC controls the allocation of resources (column 9, lines 37-40) and the switching of connections between mobile stations (column 4, lines 44-52). Nothing in Torrikka indicates that this control is taken away from the BSC.

The Examiner further asserts that:

It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.⁶

Appellant respectfully submits that the Examiner's position is unsound. Appellant's invention is entitled "A Device for taking Control of Resources in a Communication Network in order to insert traffic". Appellant's original specification (for example, FIGS. 1-8) discloses a data management device (D) which comprises control means (M) configured to be coupled to a

⁶ Page 2 of the Advisory Action dated March 17, 2008.

traffic source (TS), and which takes control of at least a portion of the resources of a base station (for example, pages 10-11 of the original specification), instead of a terrestrial node (for example, page 12 of the original specification), and enables the transfer of data from the traffic source to the base station (for example, page 12 of the original specification).

Claim 1 recites:

A data management device for a communication installation including at least one base station having resources and at least one terrestrial node connected to a core network and to said base station to control its resources via an interface, the device comprising control means configured to be coupled to a traffic source and to said interface and configured to take local control, on command, of at least a portion of said resources of said base station, instead of said terrestrial node, to enable transfer of data between said traffic source and said base station.

Accordingly, Appellant respectfully submits it is quite clear that claim 1 is drawn to limitations which define the operation and apparatus of Appellant's disclosed invention. Appellant further submits that the claimed invention clearly distinguishes over the cited prior art, since there is no teaching or suggestion in the cited prior art of a data management device which includes "control means configured to be coupled to a traffic source and to said interface and configured to take local control, on command, of at least a portion of said resources of said base station, instead of said terrestrial node, to enable transfer of data between said traffic source and said base station" as recited in independent claim 1.

The Examiner further asserts:

Applicant has had an opportunity to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by

clarifying or substantially narrowing the claim language. Thus Applicant intends that a broader interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections.⁷

Appellant respectfully submits that the Examiner's position is severely flawed for at least the following reasons.

First, it is well established that Appellant is entitled to draft claims as broadly as supported by the specification. Second, there is simply no requirement that Appellant has to amend the claims in order to narrow the claim language or to construe a narrower meaning or interpretation of the limitations. Appellant may choose to amend the claim language to distinguish over the prior art if the claimed invention reads on the prior art. However, in this instance, Appellant respectfully submits that the claimed invention does not read on the cited art. Accordingly, Appellant does not have to amend the claimed subject matter. Third, contrary to the Examiner's assertion, Appellant does not have to argue a narrower interpretation of the claims or amend the claims . Fourth, although it may be true that during examination the claims may be broadly interpreted in light of the specification, Appellant notes that the standard for claim interpretation is not the broadest possible meaning of the claim terms, but rather the broadest ***reasonable*** interpretation consistent with the specification. See MPEP 2111. Appellant submits that the Examiner's interpretation of the claim language is wholly unreasonable since the claimed data management device certainly does not read on the teachings of Torikka.

The Examiner further asserts:

⁷ Page 10 of the final Office Action dated November 27, 2008.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims.⁸

The Examiner's assertion that Appellant intends that a broad interpretation be given to the claims is clearly erroneous. Appellant expects that each limitation of the claim would be considered and interpreted in light of the specification.

Further, Appellant finds the Examiner's assertion that Appellant has failed to supply arguments commensurate in scope with the claims, unclear. Appellant has continually and consistently argued that Torrika does not teach or suggest all of the features of the claims, and clearly set forth features of the claimed invention that were not disclosed by the cited references⁹.

For at least these reasons, Appellant respectfully submits that the Examiner § 102 rejection of claim 1 is improper, and respectfully submits that the rejection of claims 1-21 should be reversed.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

⁸ Page 11 of the Office Action.

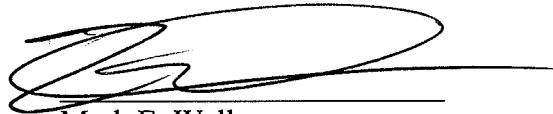
⁹ See for example (1) pages 10-11 of the Amendment filed on May 8, 2007 and (2) pages 9-15 of the Response filed on September 5, 2007.

Appeal Brief Under 37 C.F.R. § 41.37
U.S. Application No.: 10/629,597

Attorney Docket No.: Q76502

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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Date: August 13, 2008

CLAIMS APPENDIX

CLAIMS 1-21 ON APPEAL:

1. (Previously Presented): A data management device for a communication installation including at least one base station having resources and at least one terrestrial node connected to a core network and to said base station to control its resources via an interface, the device comprising control means configured to be coupled to a traffic source and to said interface and configured to take local control, on command, of at least a portion of said resources of said base station, instead of said terrestrial node, to enable transfer of data between said traffic source and said base station.

2. (Original): The device claimed in claim 1 wherein said control means include at least a portion of a stack of protocols dedicated to management of said resources so as:
to manage the configuration of at least one portion of at least one cell managed by said base station and the associated resources,
to control at least one portion of the configuration of data transport channels managed by said base station,
to manage "resource" events generated by said base station and representative of the status of its resources, and
to check that identical configuration information is held by said base station and said node.

3. (Previously Presented): The device claimed in claim 1 wherein said control means include at least a portion of a stack of protocols dedicated to managing synchronization of channels under the control of said base station.

4. (Original): The device claimed in claim 2 wherein said portions of said stack of protocols dedicated to resource management and synchronization are chosen from a group comprising at least a portion of the Node B Application Part protocol, at least a portion of the Radio Resource Control protocol, at least a portion of the Frame Protocol, at least a portion of the Radio Link Control protocol, at least a portion of the Medium Access Control protocol, at least a portion of the Packet Data Convergence protocol, and at least a portion of the Broadcast/Multicast Control protocol.

5. (Previously Presented): The device claimed in claim 1 wherein said control means include a filter module configured to filter said traffic from said traffic source and said traffic from said node.

6. (Previously Presented): The device claimed in claim 1 wherein said control means are further configured to:
send said base station a resource reservation request on receipt of a request to transmit traffic to at least one user equipment situated in a cell managed by said base station and coming from said traffic source,

send said node a message indicating that said available resources are blocked on receipt of a response message generated by said base station indicating availability of resources, and send a message to said base station to release said resources that have been used and a message to said node to tell it that said resources have been unblocked when said traffic from said traffic source is finished.

7. (Previously Presented): The device claimed in claim 6 wherein said control means include a message generator module configured to send said node said messages indicating that resources have been blocked.

8. (Previously Presented): The device claimed in claim 3 wherein, in an installation including means configured to transmit data from said traffic source by radio, at first and second frequencies, respectively to user equipments situated in a cell managed by said base station and to said base station, said control means are further configured to calculate a transmission difference representative of the difference between the transmission times of said data at said first and second frequencies and to delay data received and to be transmitted to said base station by an amount substantially equal to the calculated difference.

9. (Original): The device claimed in claim 8 wherein said difference is a function of the dimensions of the coverage area of said satellite transmission means and/or said base station.

10. (Previously Presented): The device claimed in claim 8 wherein said control means include a synchronization adaptor module configured to calculate said transmission time differences between traffic from said traffic source and from said node.

11. (Previously Presented): The device claimed in claim 1 further comprising a module provided with a connection interface.

12. (Previously Presented): The device claimed in claim 11 wherein said module is configured to be connected to said base station via said connection interface.

13. (Previously Presented): The device claimed in claim 11 wherein said module is configured to be connected via said connection interface to a satellite terminal coupled to said base station and to a satellite supplied by said traffic source.

14. (Previously Presented): The device claimed in claim 1, wherein the device is installed in said base station.

15. (Previously Presented): The device claimed in claim 1, wherein the device is installed in a satellite terminal coupled to said base station and to a satellite supplied by said traffic source.

16. (Previously Presented): A communication installation comprising at least one base station having resources and at least one terrestrial node connected to a first core network and to said base station to control its resources via an interface, the installation comprising a device as claimed in claim 1.

17. (Previously Presented): The installation claimed in claim 16, further comprising a satellite access network.

18. (Previously Presented): The installation claimed in claim 17 wherein said satellite access network includes at least one satellite gateway connected to said node, at least one satellite terminal connected to one of said base stations, and at least one communication satellite configured to exchange data by radio with said satellite gateway and with said satellite terminal, said node and said core network together constituting said traffic source.

19. (Previously Presented): The installation claimed in claim 17 wherein said satellite access network includes at least one satellite gateway connected to a traffic source, at least one satellite terminal connected to one of said base stations and to said node, and at least one communication satellite configured to exchange data by radio with said satellite gateway and with said satellite terminal.

20. (Previously Presented): The installation claimed in claim 17 wherein said satellite access network includes at least one satellite gateway connected to a satellite node connected to a second core network and together therewith constituting said traffic source, at least one satellite terminal connected to one of said base stations and to said node, and at least one communication satellite configured to exchange data by radio with said satellite gateway, with said satellite terminal, and with user equipments configured to exchange data with said base station via said resources.

21. (Previously Presented): The device claimed in claim 1 wherein the device is used in a UMTS communication network, each terrestrial node being a radio network controller and each base station being a Node B.

Appeal Brief Under 37 C.F.R. § 41.37
U.S. Application No.: 10/629,597

Attorney Docket No.: Q76502

EVIDENCE APPENDIX:

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other similar evidence.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

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SUBMISSION OF APPEAL BRIEF

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Sir:

The statutory fee of \$510.00 is being charged to Deposit Account No. 19-4880 via EFS Payment Screen. The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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